



Introduction

The ZT-2060-IOP module is a ZigBee coordinator that provides both 4-channel digital input and 4-channel digital output. An embedded I/O channel binding function means that there is no need to use an external controller.

The status of each channel is bound to a remote channel of the ZT-2060. The ZT-2060-IOP continually updates the status of the DO channel of the remote ZT-2060 based on its own DI channels. It also reads the status of the DI channel of the remote ZT-2060 to synchronize its own DO channels.

The ZT-2060-IOP also provides external DIP switches for easy configuration, which can be used to synchronize the digital signals in any difficult wiring environment.

System Specifications

Communication Interface	
Wireless Standards	ZigBee 2007 Pro
Transmission Power	11 dBm (FCC Certified)
2.4 GHz Antenna	5 dBi Omni directional
Transmission Range (LoS)	700 m (Typical)
Certification	CE/FCC, FCC ID
Max. Slaves in a ZigBee Network	255
Hot Swap	Rotary and DIP switch
LED Indicators	
Power	1 LED, Red
ZigBee Communication	1 LED, Green
Digital Input and Output	4 Green LEDs for Digital Input 4 Red LEDs for Relay Output
Isolation	
Intra-module Isolated, Field-to-Logic	2500 Vdc
EMS Protection	
ESD (IEC 61000-4-2)	4 kV Contact for Power Line, Communication Line and each Channel, 8 kV Air for Random Point
EFT (IEC 61000-4-4)	4 kV for Power Line
Power	
Input Voltage Range	+10 Vdc ~ +30 Vdc
Power Consumption	1.4 W Max.
Mechanical	
Flammability	Fire Retardant Materials (UL94-V0 Level)
Dimensions (W x L x H)	33 mm x 94 mm x 110 mm
Installation	DIN-Rail
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Relative Humidity	10 ~ 90% RH, Non-condensing

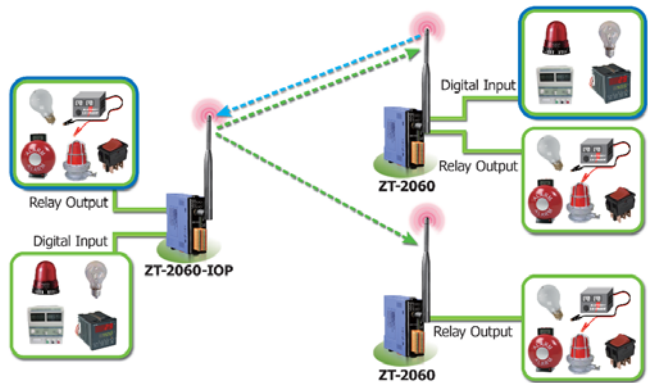
Features

- ISM 2.4 GHz Operating Frequency
- Fully Compliant with 2.4G IEEE 802.15.4/ZigBee Specifications
- Wireless Transmission Range up to 700 m
- 4 Channels Pair-connection of the Digital Input and Relay Output
- Surge and ESD Protection
- DIN-Rail Mountable



Applications

Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.



I/O Specifications

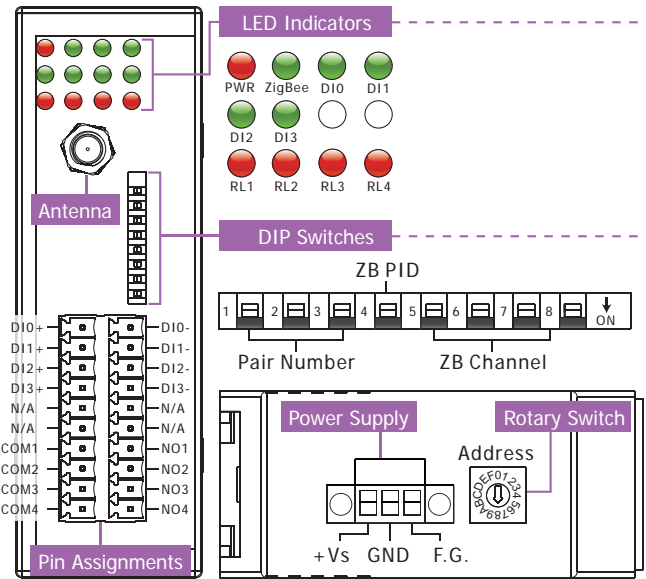
Digital Input		
Input Channels		6
Input Types		Isolated, Wet Contact (Sink/Source)
Input Level	On Voltage Level	+3.5 Vdc ~ +30 Vdc
	Off Voltage Level	+1 Vdc Max.
Input Impedance		3 kΩ, 0.33 W
Counter	Channels	6
	Max. Count	16-bit (65535)
	Max. Input Frequency	100 Hz
	Min. Pulse Width	5 ms
Relay Output		
Output Channels		4
Output Types		Power Relay, Form A
Contact Rating		5 A @ (250 VAC/30 Vdc)
Max. Contact Voltage		270 VAC/125 Vdc
Operate Time		10 ms max. at Rated Voltage
Release Time		5 ms max. at Rated Voltage
Endurance	Electrical	Resistive Load: 100,000 ops. min. (10 ops/minute)
	Mechanical	At No Load: 20,000,000 ops. min. (300 ops/minute)
Dielectric Strength	Between Contacts	750 VAC for 1 minute
	Between Coil to Contacts	3,000 VAC for 1 minute
Insulation Resistance		5,080 V (1.2/50 μs)
Surge Strength		5 ms max. at Rated Voltage
ESD Protection		+/-4 kV contact for each channel

Wiring

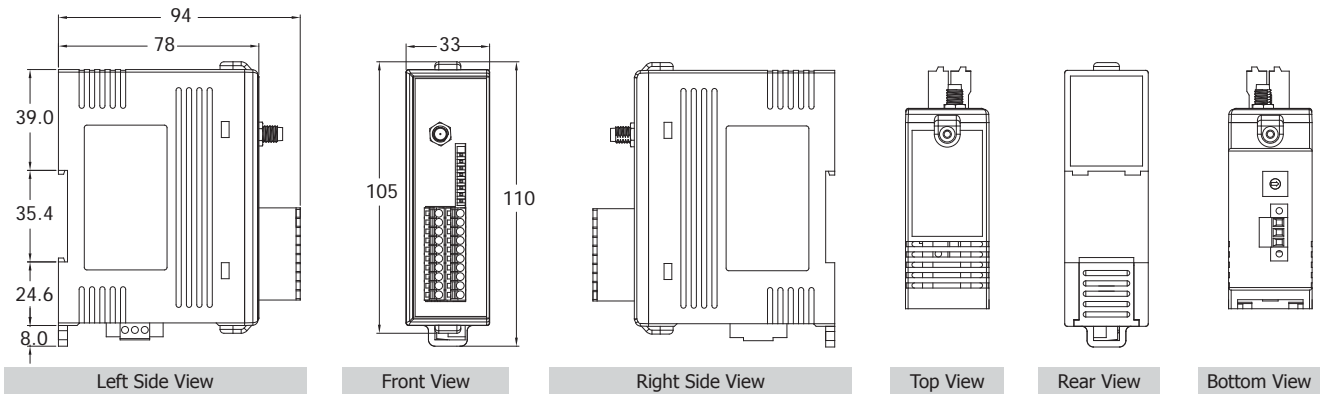
Digital Input/Counter	ON State Readback as 1	OFF State Readback as 0
	+3.5 ~ +30 Vdc	OPEN or <1 Vdc
Sink		
Source		

Power Relay	ON State Readback as 1	OFF State Readback as 0
Relay Output		

Appearance



Dimensions (Units: mm)



Ordering Information

ZT-2060-IOP CR	ZigBee Pair-connection to the 4-ch Isolated Digital Input and 4-ch Relay Output Module (Host, ZigBee Coordinator) (RoHS)
ZT-2060 CR	ZigBee 6-ch Isolated Digital Input and 4-ch Relay Output Module (Slave, ZigBee Router) (RoHS)

Important Note: ZigBee Pair-connection module is a ZigBee host to coordinate the ZigBee I/O module. Please remember to order at least one ZT-2060 module as the ZigBee I/O pairing.

Accessories

MDR-20-24	24 VDC/1.0 A, 24 W Power Supply with DIN-Rail Mounting
ZT-2510 CR	ZigBee Repeater (RoHS)